

## ABSTRACT

A TDMA radio communication system uses a multiple sub-carrier modulation method. The TDMA radio communication system comprises at least a first and a second radio station. The second radio station selects only those sub-carriers capable of providing a transmission rate not less than a predetermined value in the first radio station, on the basis of the reception conditions of each sub-carrier of said first radio station. The second radio station then modulates the selected sub-carriers using a modulation level or a coding rate in accordance with the reception conditions of the sub-carriers so as to perform communication, thereby obtaining a desired transmission rate while controlling interface to other stations.